



RTCM

**Radio Technical Commission for
Maritime Services**

***RTCM's Standard 12800.0 on
Satellite Emergency Locating Devices (SEND)***



**NTSB FORUM TO IMPROVE
GENERAL AVIATION
SEARCH AND RESCUE**

**Bob Markle
RTCM
Arlington, VA USA
Rmarkle@rtcm.org
+1 703 527-2000**

RTCM Background

RTCM chartered in Washington, DC in 1947

- Originally U.S. State Department Advisory Committee

Now International, Non-Profit, Scientific, Professional and Educational Organization

- Focuses on All Aspects of Maritime Radiocommunications and Radionavigation
- Develops and Publishes RTCM Standards



RTCM Background

Over 120 Member Organizations

Government, Industry, and Educational Members

RTCM Standards are Incorporated by Reference

U.S. Federal Communications Commission and U.S. Coast Guard
Regulations

- Emergency Position Indicating Radio Beacons (EPIRB)
- Personal Locator Beacons (PLB)
- Radar and Electronic Chart Systems for domestic service ships

Other International Applications



RTCM Special Committee 128

Satellite Emergency Notification Devices

2008

- **Emerging Private Emergency Alerting Systems (PEAS (??))**
- **Concerns about reliability and effectiveness**
- **Coast Guard requests RTCM to develop a standard**
 - Notes similarity to Personal Locator Beacons
 - Need for reliable connection to SAR resources

2009

- **First committee meeting**

2011

- **RTCM 12800.0 (SENDS) published**



RTCM Special Committee 128

Satellite Emergency Notification Devices

Features

- **“SOS” distress alert for SAR from remote locations**
- **Operates through private satellite systems**
- **Portable or vehicle mounted**
- **Based on RTCM PLB standard for operational, technical, environmental performance**
- **Typically relies on GPS location**
- **Includes Distress Cancel function**
- **No subscription – no distress function**



RTCM Special Committee 128

Satellite Emergency Notification Devices

Features

- **“SOS” alert may be one function of multi-function device**
- **Excludes satellite telephones**
- **24 hr reserve battery life for distress alerts**
 - **Alerts user**
 - **Manual override possible**
- **Distress alert must reach call center in 5 minutes**
- **Includes informative annex on Emergency Call Centers**
 - **Developed by National Search and Rescue Committee**



RTCM Special Committee 128

Satellite Emergency Notification Devices

RTCM has petitioned FCC for mandatory compliance

U.S. Coast Guard and U.S. Air Force support expected

